This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.



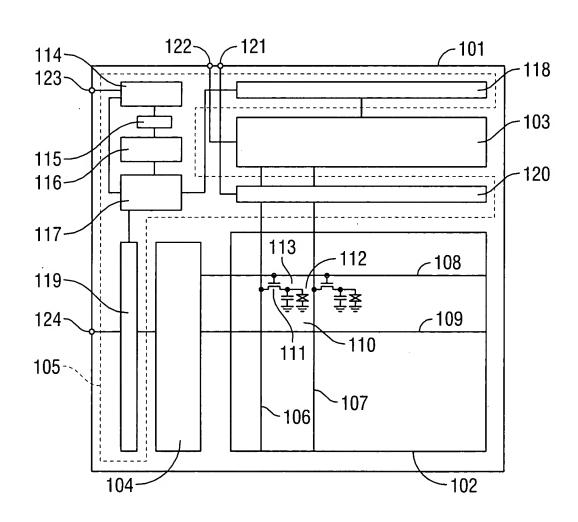


FIG. 1

Page 2 of 27

Appln No.: 10/753,524
Applicant(s): Shunpei Yamazaki et al.
SEMICONDUCTOR DEVICE AND METHOD OF

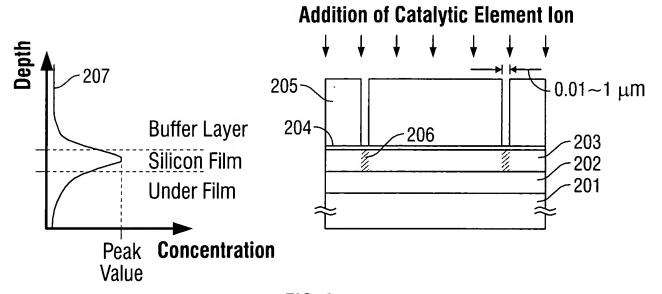


FIG. 2

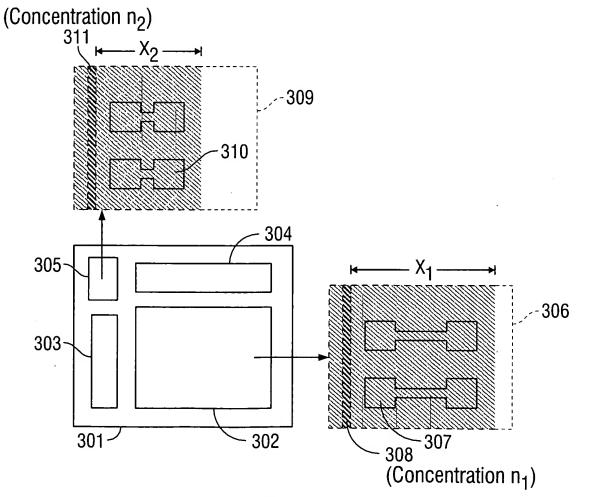
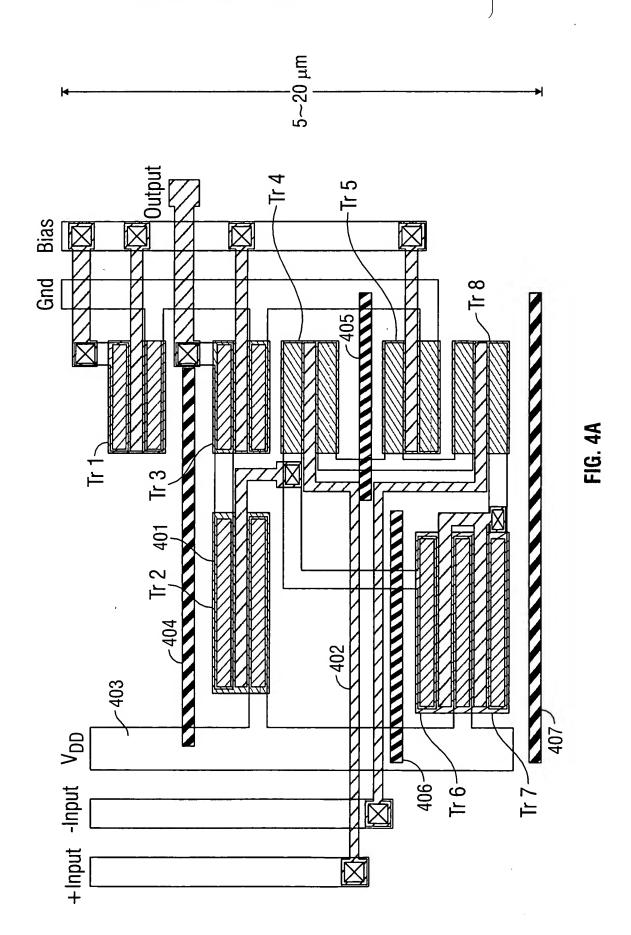
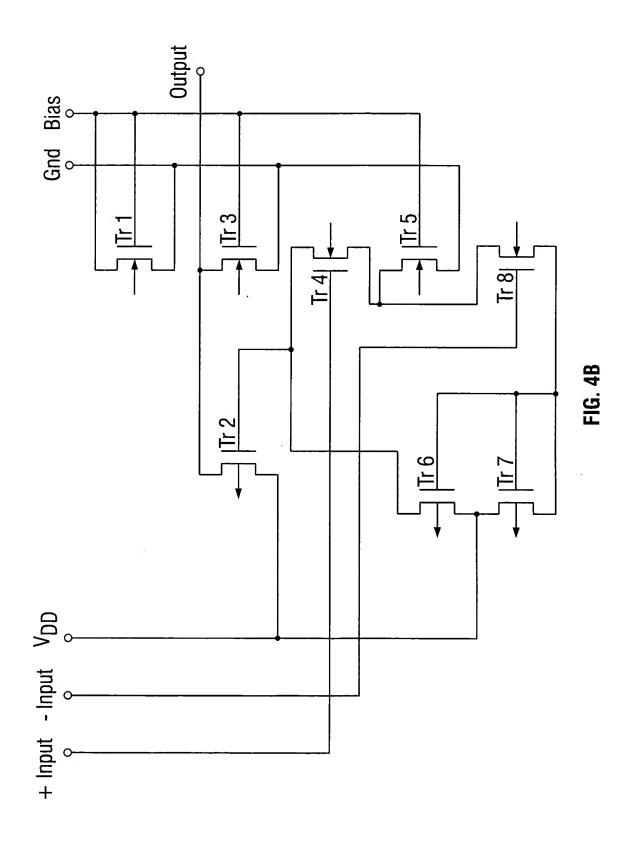


FIG. 3

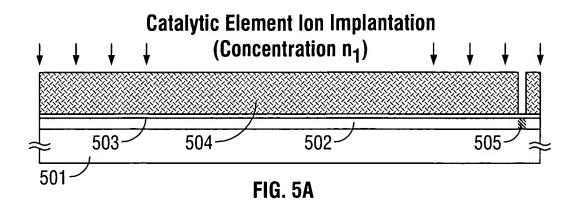


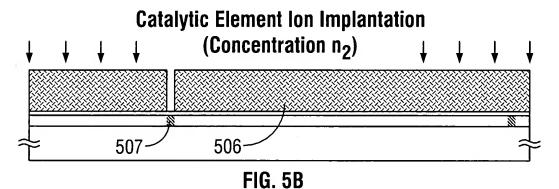


Appln No.: 10/753,524

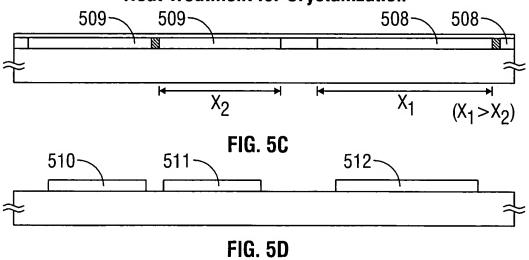
Applicant(s): Shunpei Yamazaki et al.

SEMICONDUCTOR DEVICE AND METHOD OF





Heat Treatment for Crystallization



Gettering Process of Catalytic Element

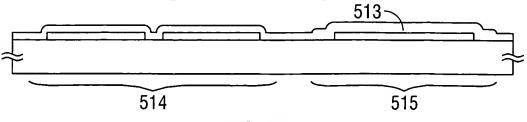


FIG. 5E

Page 6 of 27 Appln No.: 10/753,524 Applicant(s): Shunpei Yamazaki et al. SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME 520-521 -518 -516 519-517 FIG. 6A **Addition of Impurity Ion for Giving N-Type** (Formation of n⁻ Region) 525 529 526 528 523 FIG. 6B **Addition of Impurity Ion for Giving P-Type** (Formation of p Region) -530 531 532 FIG. 6C 533 535 534 FIG. 6D **Addition of Impurity Ion for Giving N-Type** (Formation of n⁺ Region) 536 538 542 541 FIG. 6E

Page 7 of 27

Appln No.: 10/753,524 . Applicant(s): Shunpei Yamazaki et al. SEMICONDUCTOR DEVICE AND METHOD OF

MANUFACTURING THE SAME

Addition of Impurity Ion for Giving P-Type (Formation of p⁺ Region)

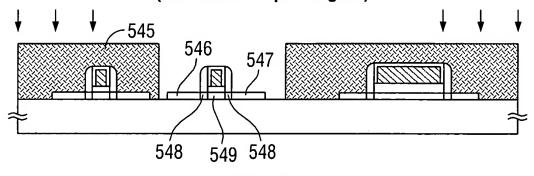


FIG. 7A

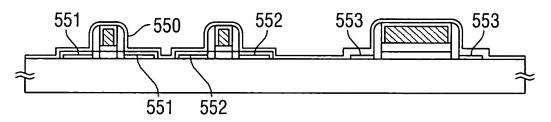


FIG. 7B

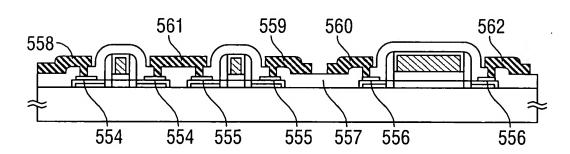


FIG. 7C

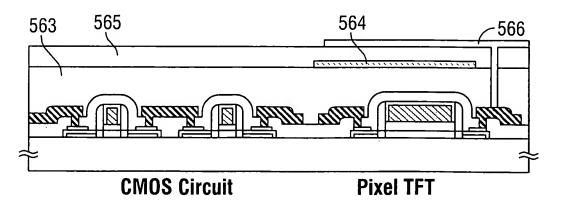


FIG. 7D

Page 8 of 27



FIG. 8

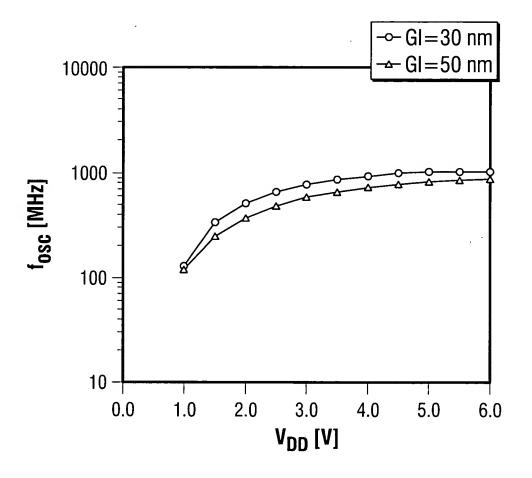


FIG. 9

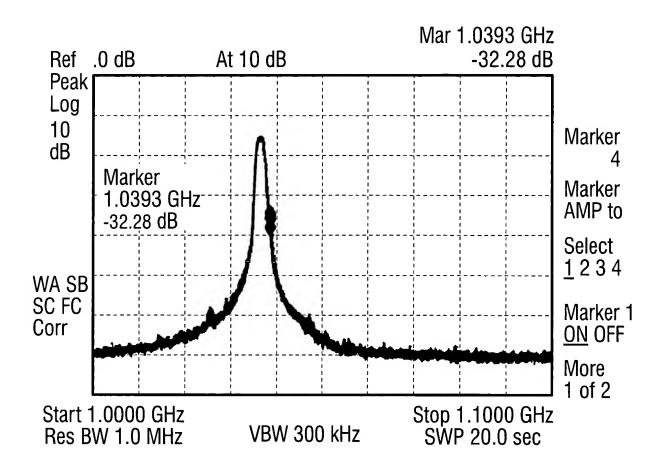


FIG. 10

T[®]k Run: 5.00GS/s ET Average

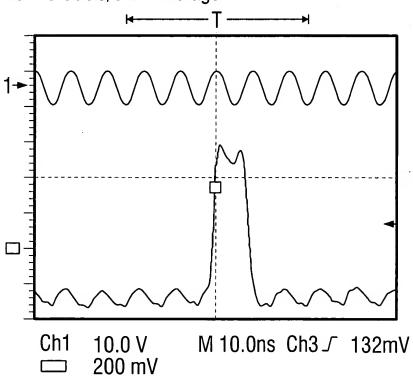


FIG. 11

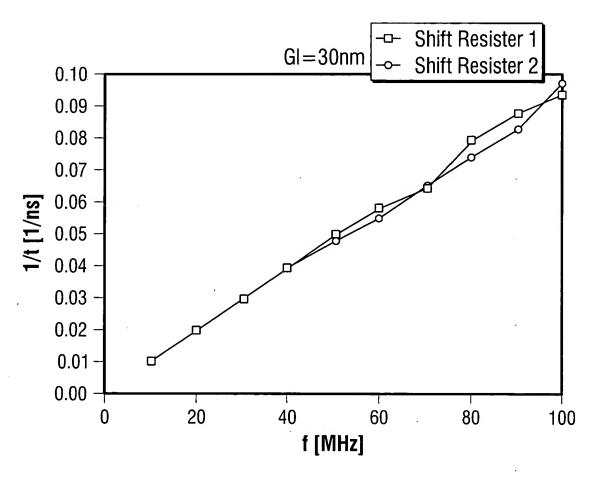


FIG. 12

Page 13 of 27

Appln No.: 10/753,524 Applicant(s): Shunpei Yamazàki et al. SEMICONDUCTOR DEVICE AND METHOD OF

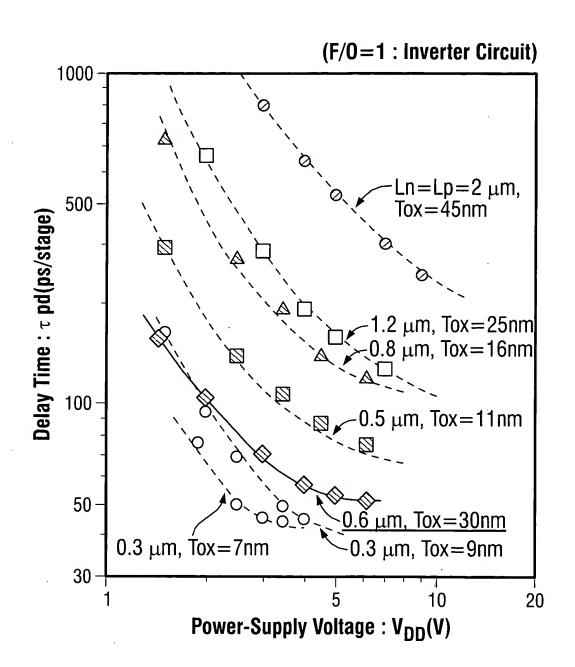
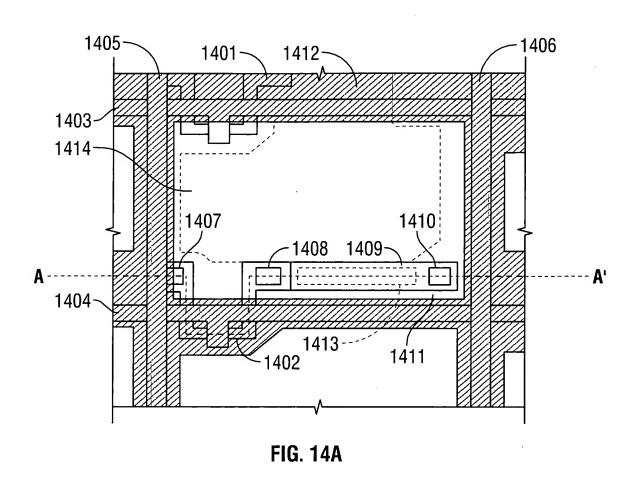


FIG. 13

Appln No.: 10/753,524

Applicant(s): Shunpei Yamazaki et al. SEMICONDUCTOR DEVICE AND METHOD OF



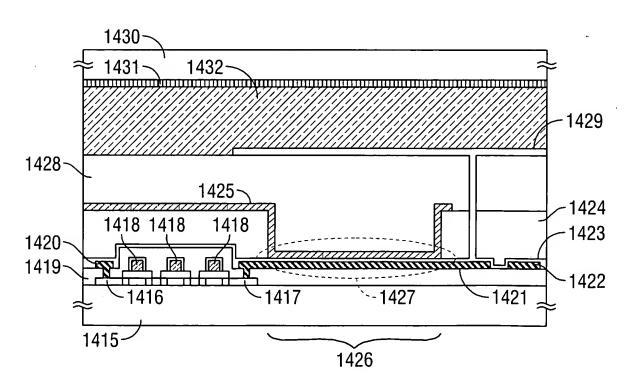


FIG. 14B

Page 15 of 27

Appln No.: 10/753,524
Applicant(s): Shunpei Yamazaki et al.
SEMICONDUCTOR DEVICE AND METHOD OF

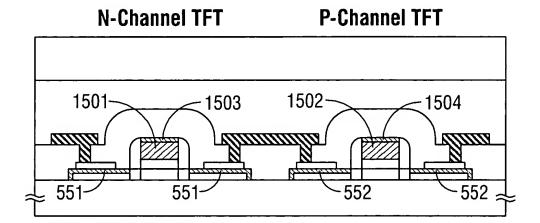


FIG. 15A

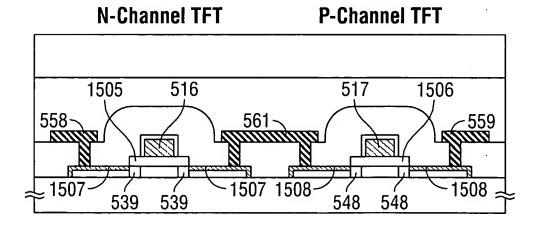


FIG. 15B

Page 16 of 27

Appln No.: 10/753,524 Applicant(s): Shunpei Yamazaki et al.

SEMICONDUCTOR DEVICE AND METHOD OF

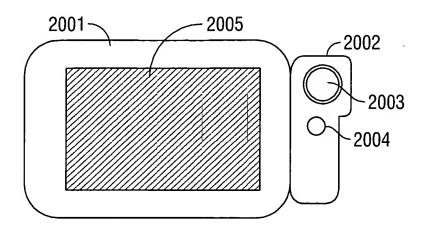


FIG. 16A

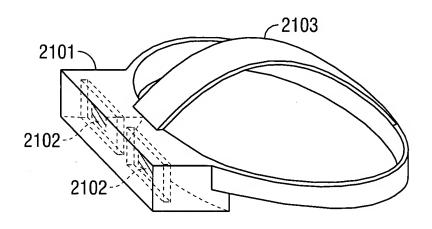


FIG. 16B

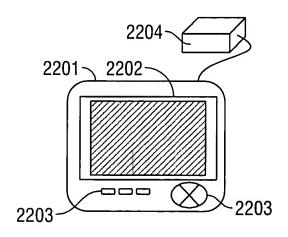


FIG. 16C

Page 17 of 27

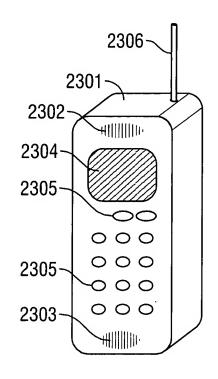


FIG. 16D

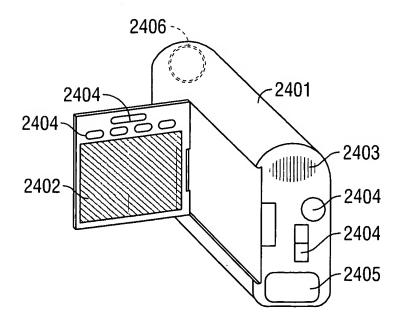


FIG. 16E

Page 18 of 27

Appln No.: 10/753,524 . Applicant(s): Shunpei Yamazaki et al. SEMICONDUCTOR DEVICE AND METHOD OF

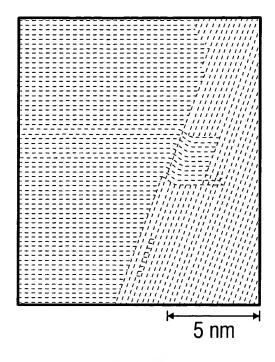


FIG. 17A

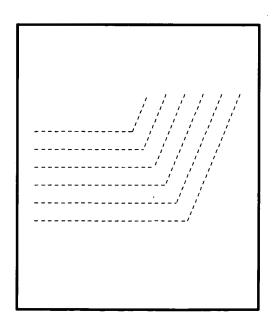


FIG. 17B

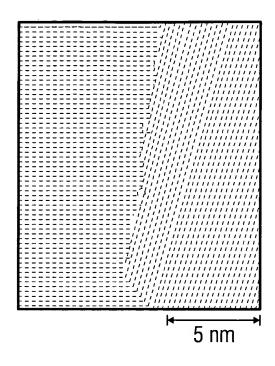


FIG. 17C

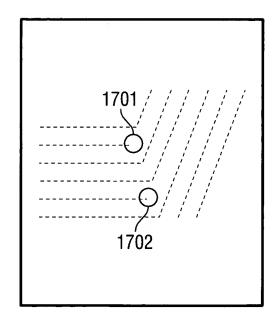
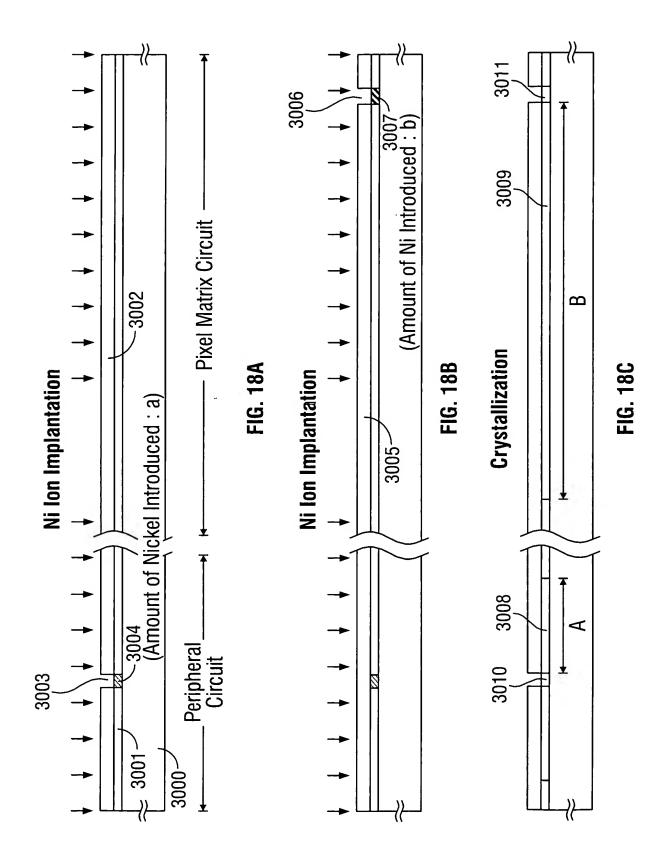
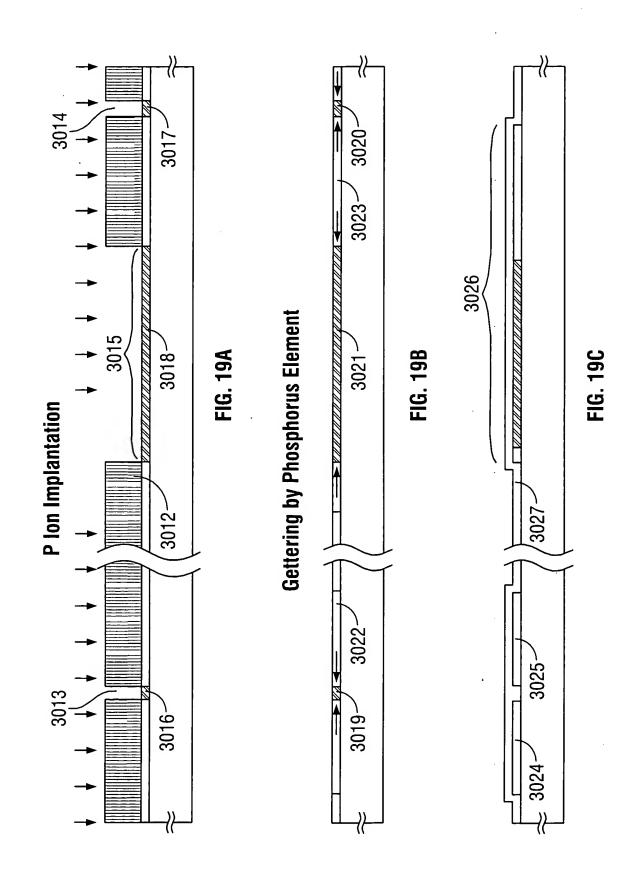
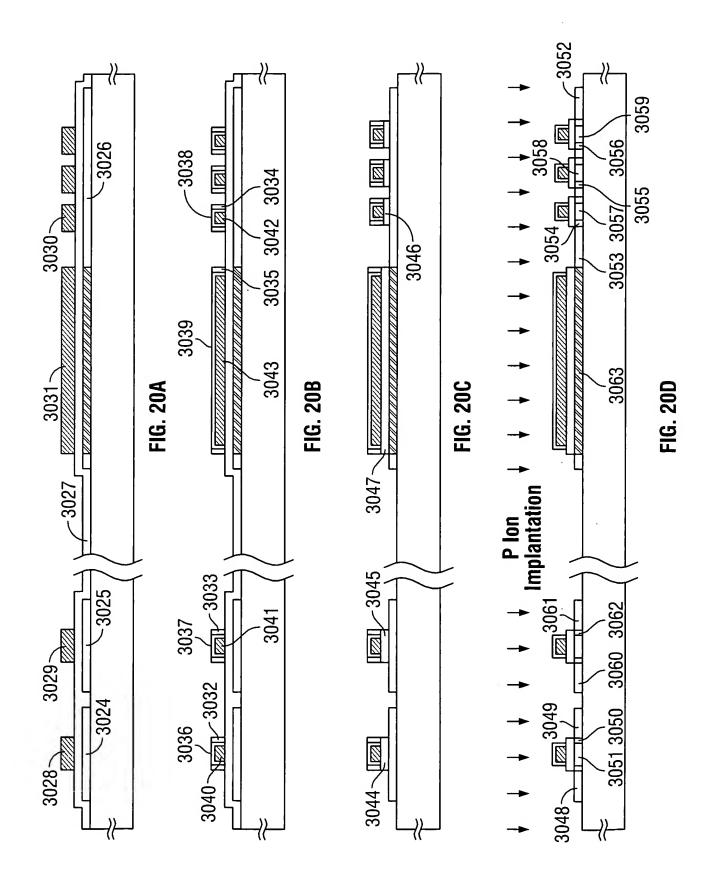


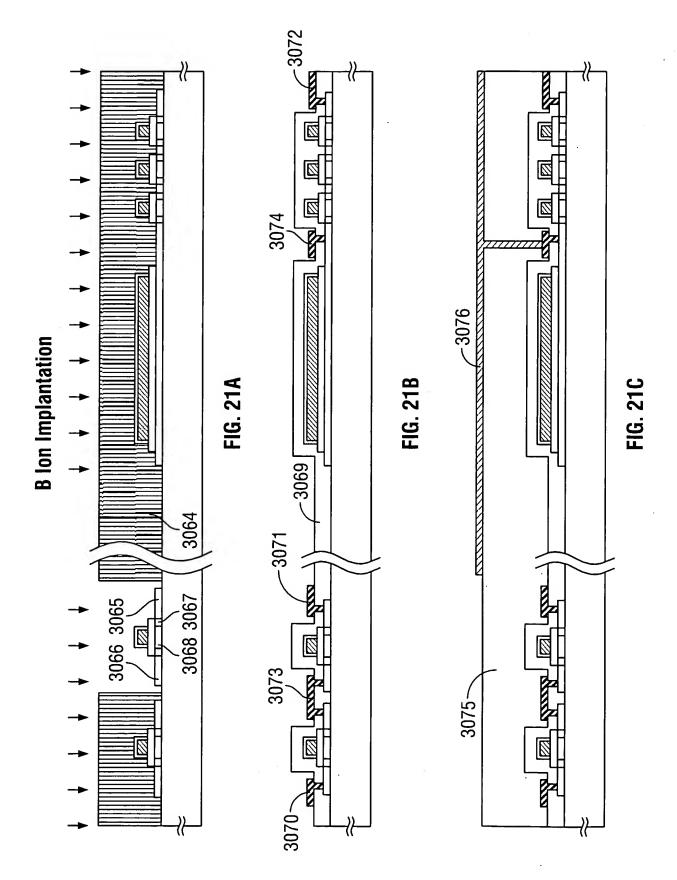
FIG. 17D

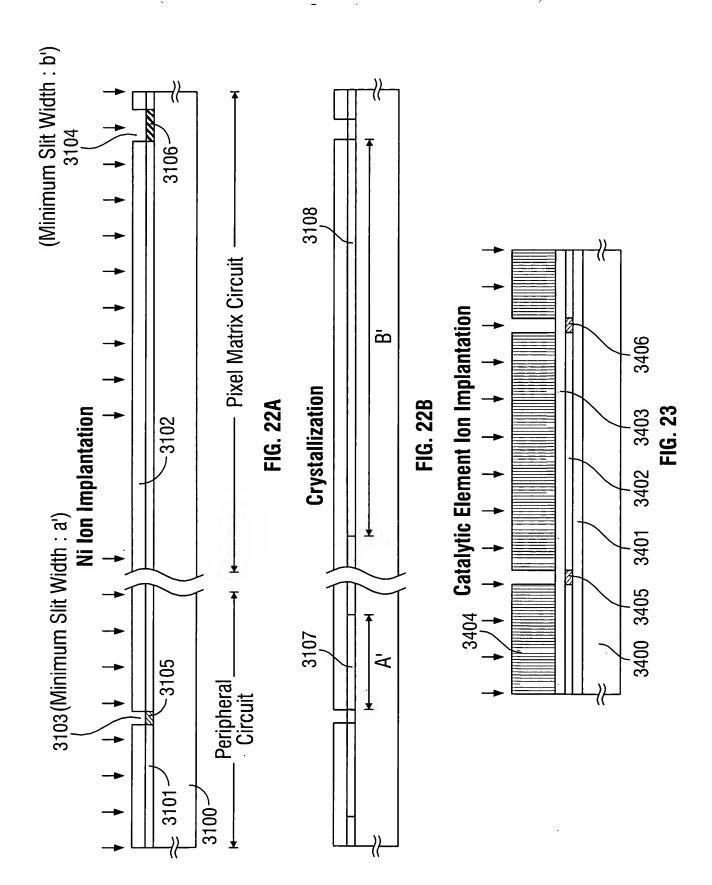


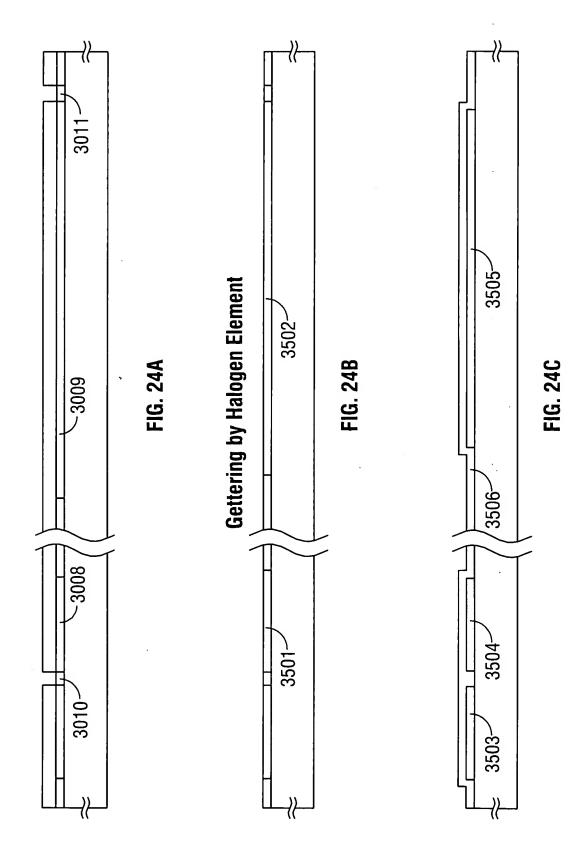


Page 22 of 27









Page 26 of 27

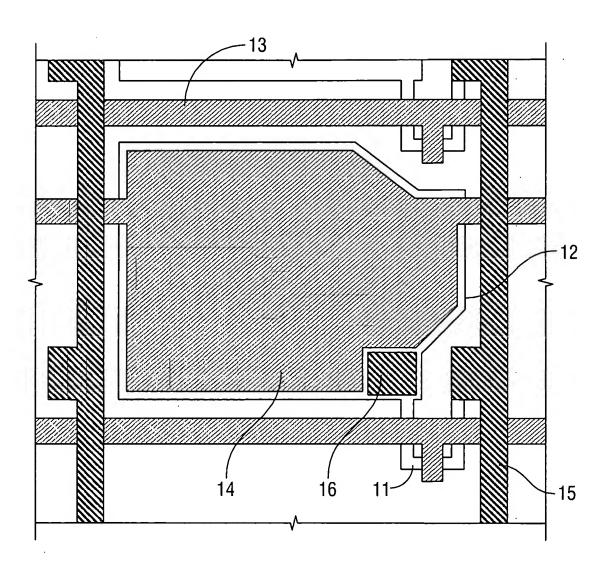


FIG. 25

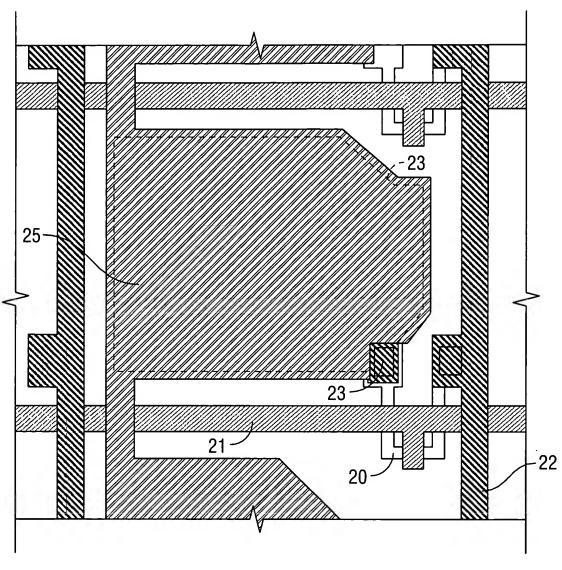


FIG. 26A

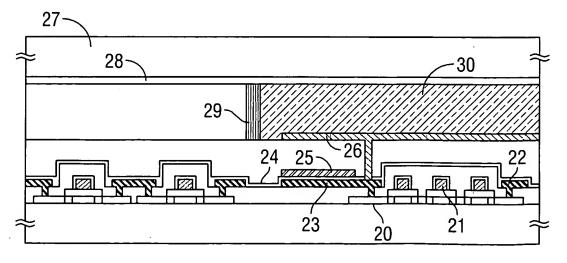


FIG. 26B